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U. S. DEPT. OF AGRICULTURE
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CURRENT ECONOMIC EDUCATION

WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
UTAH

UNITED STATES DEPARTMENT of AGRICULTURE--SOIL CONSERVATION SERVICE,
and
STATE ENGINEER of UTAH

In cooperation with U.S. Forest Service, Bureau of Reclamation,
Utah Fish and Game Dept., Utah Agricultural Experiment Station,
U.S. National Park Service, U.S. Geological Survey; and other
Federal, State, and private organizations.

||||||| AS OF |||||
JAN. 1, 1964

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Water Supply Outlook Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from advance estimates of the streamflow.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, up to 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

Streamflow forecasts are obtained by a comparison of total or maximum snow accumulation, as measured by snow water equivalent, to the subsequent spring and summer or snowmelt season runoff over a period of years. The snow water equivalent measured in selected snow courses provides most of the index to the streamflow forecast for the following season. More accurate forecasts are usually obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast procedure. Early season forecasts assume average climatic conditions through the snowmelt season.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions. Soil Conservation Service Reports may be secured from Water Supply Forecasting Unit, Soil Conservation Service, P.O. Box 2807, Portland, Oregon 97208.

PUBLISHED BY SOIL CONSERVATION SERVICE

<u>REPORTS</u>	<u>ISSUED</u>	<u>LOCATION</u>	<u>COOPERATING WITH</u>
RIVER BASINS			
WESTERN UNITED STATES _____	MONTHLY (FEB.-MAY) _____	PORTLAND, OREGON _____	ALL COOPERATORS
BASIC DATA SUMMARY _____	OCTOBER 1 _____	PORTLAND, OREGON _____	ALL COOPERATORS
STATES			
ALASKA _____	MONTHLY (MAR.-MAY) _____	PALMER, ALASKA _____	ALASKA S.C.D.
ARIZONA _____	SEMI-MONTHLY _____ (JAN.15 - APR.1)	PHOENIX, ARIZONA _____	SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
COLORADO AND NEW MEXICO _____	MONTHLY (FEB.-MAY) _____	FORT COLLINS, COLORADO _____	COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER
IDAHO _____	MONTHLY (JAN.-JUNE) _____	BOISE, IDAHO _____	IDAHO STATE RECLAMATION ENGINEER
MONTANA _____	MONTHLY (JAN.-JUNE) _____	BOZEMAN, MONTANA _____	MONT. AGR. EXP. STATION
NEVADA _____	MONTHLY (JAN.-MAY) _____	RENO, NEVADA _____	NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES
OREGON _____	MONTHLY (JAN.-JUNE) _____	PORTLAND, OREGON _____	OREG. STATE UNIVERSITY OREGON STATE ENGINEER
UTAH _____	MONTHLY (JAN.-JUNE) _____	SALT LAKE CITY, UTAH _____	UTAH STATE ENGINEER
WASHINGTON _____	MONTHLY (FEB.-JUNE) _____	SPOKANE, WASHINGTON _____	WN. STATE DEPT. OF CONSERVATION
WYOMING _____	MONTHLY (FEB.-JUNE) _____	CASPER, WYOMING _____	WYOMING STATE ENGINEER

PUBLISHED BY OTHER AGENCIES

<u>REPORTS</u>	<u>ISSUED</u>	<u>AGENCY</u>
BRITISH COLUMBIA _____	MONTHLY (FEB.-JUNE) _____	WATER RESOURCES SERVICE, DEPT. OF LANDS, FOREST AND WATER RESOURCES, PARLIAMENT BLDG., VICTORIA, B.C., CANADA
CALIFORNIA _____	MONTHLY (FEB.-MAY) _____	CALIF. DEPT. OF WATER RESOURCES, P.O. Box 388, SACRAMENTO, CALIF.

WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
UTAH

JANUARY 1, 1964

Report prepared by

GREGORY L. PEARSON, Snow Survey Supervisor

and

GARRY DINSDALE, Asst. Snow Survey Supervisor

SOIL CONSERVATION SERVICE
SNOW SURVEY SECTION
125 SOUTH STATE
SALT LAKE CITY UTAH 84111

Issued by

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STATE ENGINEER
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SALT LAKE CITY, UTAH

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SOIL CONSERVATION SERVICE
SALT LAKE CITY, UTAH

DR. D.W. THORNE

DIRECTOR
UTAH AGRICULTURAL
EXPERIMENT STATION
LOGAN, UTAH

WATER SUPPLY OUTLOOK

as of
JANUARY 3, 1964

* Although the present snowpack in Utah's mountains is be- *
* tween about two and three times that of last year, it is *
* only 48% of the usual amount. Moisture in the soils *
* underneath the snow is near or above average. Assuming *
* average snow and rainfall for the rest of the winter and *
* spring, most streams can be expected to yield from about *
* 65% to 85% of average amounts next summer. Reservoir *
* storage is generally good in northern areas, poor in the *
* south. *

While the present snowpack for the state as a whole is 48%, it varies from about 25% for the Strawberry reservoir valley, the upper Virgin and Sevier Rivers, to near 70% on Mt. Nebo and in the mountains near Tooele.

Since in the average year there is still 60% to 65% of the snowpack yet to come, by April 1st the snowpack percentages will be much higher than now, assuming average snowfall occurs during the next three months. To illustrate, the present snowpack near Salt Lake is 44% of average, but will be 78% on April 1st if snowfall is normal during January, February and March.

Forecasts of streamflow are made by combining present snowpack and soil moisture conditions and assuming average weather conditions for the balance of the season. On this basis, forecasts of next summer's streamflow vary from a low of 53% for the inflow to the Sevier River between Kingston and Vermillion Dam, to a high of 92% for the American Fork River.

In central and northern Utah the higher elevation streams are expected to yield between about 70% to 85%. Examples of these are the Logan, Bear, Weber, Provo, northern Uintah Basin streams, San Pitch, Price and San Rafael Rivers. Lower elevation watersheds such as East Canyon Creek near Morgan, Parley's Creek near Salt Lake, Strawberry River at Duchesne and Hobbie Creek near Springville are forecast to produce from about 55% to 70% of the 15 year average (1943-57).

In southern Utah the upper Sevier and Virgin Rivers, and the smaller streams near them should yield near 65% to 70%. Clear Creek near Sevier is forecast at 57%.

At present there is no prospect that flow in the Sevier River between Kingston and Vermillion Dam will get high enough to allow water for storage. Below Vermillion Dam, there is a possibility of flow getting high enough to give about 1,000 acre feet for secondary rights.

According to values reported by the U. S. Geological Survey, the over-all water supply picture is modified by storage in the state's reservoirs. On the Sevier River, reservoir supplies fail to help the outlook, since total storage in Sevier Bridge, Piute and Otter Creek is only 28% of average.

Storage in Utah Lake and Strawberry Reservoir is also down - 41% and 40% of average respectively. Total storage in the remaining reservoirs of Northern Utah is essentially average.

Since there is nearly two thirds of the snowpack still to come, the water outlook can change considerably -- either up or down -- as the season progresses.

RESERVOIR STORAGE (1,000 Ac. Ft.)

BASIN or STREAM	RESERVOIR	USABLE CAPACITY	MEASURED (FIRST OF MONTH)		
			THIS YEAR	LAST YEAR	AVERAGE ^a

GREAT BASIN

<u>Bear River</u>	Bear Lake	1421.0	700.0	717.3	806.4
	Woodruff Narrows	26.5	13.0	11.0	- -
<u>Little Bear</u>	Hyrum	15.3	12.2	6.9	9.8
	Porcupine	11.3	- -	- -	- -
<u>Ogden</u>	Pineview	110.0	56.1	53.0	7.2
<u>Weber</u>	Rockport	59.1	26.1	32.3	- -
	Echo	73.9	30.5	24.3	26.3
	East Canyon	28.7	17.9	16.3	14.1
<u>Provo</u>	Deer Creek	149.7	100.9	117.8	84.8
<u>Spanish Fork</u>	Strawberry	270.0	51.1	47.3	128.6
<u>Utah Lake</u>	Utah Lake (b)	1149.0	214.4	205.7	516.7
<u>Sevier River</u>	Otter Creek	52.5	10.6	14.6	21.6
	Piute	74.0	11.2	18.2	29.6
	Sevier Bridge	236.0	29.4	38.2	120.1
<u>Beaver River</u>	Rocky Ford	23.3	4.5	5.7	11.9

COLORADO RIVER DRAINAGE

<u>Ashley Creek</u>	Steinaker	33.3	6.9	- -	- -
<u>Lake Fork</u>	Moon Lake	35.8	17.4	13.0	10.6
<u>Price River</u>	Scofield	65.8	9.6	16.7	13.7
<u>Green</u>	Flaming Gorge	3789.0*	924.4	52.4	- -
<u>San Juan</u>	Navajo	1709.0*	343.2	69.6	- -
<u>Colorado</u>	Lake Powell	27000.0*	2,968.0	- -	- -

All data contained in this table supplied by the U.S. Geological Survey.

* - Total capacity reported.

COMPARISON of SNOW COVER

RIVER BASIN or TRIBUTARY WATERSHED	NO. of COURSES AVERAGE	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF :	
		LAST YEAR	AVERAGE *

GREAT BASIN

Smith's Fork - Bear River (Wyo.)	2	260	84
Logan River	3	255	62
Ogden River	2	380	65
Weber River above Echo Dam	6	178	42
East Canyon Creek	3	186	46
Farmington Creek	2	146	42
Salt Lake Area	4	170	44
Tooele Area	1	260	74
American Fork River	3	825	57
Provo River above Vivian Park	7	338	41
Strawberry Reservoir Valley	3	283	26
Payson Creek	2	186	72
Sevier River above Hatch	3	187	24
East Fork Sevier River	3	108	50
Clear Creek above Sevier	1	174	49
Salina Creek	2	117	64
San Pitch River	4	350	63
Coal Creek-Cedar City	3	237	44

COLORADO RIVER BASIN

Duchesne-Strawberry Rivers	6	240	30
Whiterocks - Uintah Rivers	3	233	30
Price River	6	361	35
San Rafael River	2	340	60
Escalante River	3	108	50
Virgin River	4	197	26

* Actual or Estimated 1943-57, 15 year Average.

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a

GREAT BASIN DRAINAGE

UPPER BEAR RIVER (Above Harer, Idaho)

CCC Camp x	10G7	7500	12/30	20	4.0	1.6	4.9
Salt River Summit x	10G8	7900	12/30	24	5.4	2.0	6.2*
Trial Lake x	10J8	9800	12/30	24	5.3	2.7	11.0*

LOWER BEAR RIVER (Below Harer, Idaho)

Garden City Summit	11H7	7600	12/30	22	5.2	2.5	7.5*
Klondike Narrows	11H1	7400	12/30	21	4.2	1.4	7.2*
Tony Grove R.S.	11H3	6250	12/30	14	2.7	0.2	4.8*

OGDEN RIVER

Ben Lomond Peak	11H8	8000	12/27	29	7.8	2.3	13.5*
Ben Lomond(lower)	11H9	5850	12/27	19	4.2	0.1	5.8*
Ben Lomond Trail	11H30	6000	12/27	21	4.5	0.1	- -
Cutler Creek	11H29	6780	12/27	25	6.0	1.5	- -

WEBER RIVER

Beaver Creek R.S.	11J24	7500	12/30	6	1.1	T	4.1*
Lamb's Canyon x	11J14	6600	1/2	17	3.0	1.6	6.0*
Parley's Canyon Smt.	11J15	7500	12/28	16	3.2	2.1	7.3*
Silver Lake x	11J16	8725	1/1	21	5.0	2.3	11.5
Smith & Morehouse	11J4	7600	12/27	11	1.9	1.4	4.9*
Trial Lake x	10J8	9800	12/30	24	5.3	2.7	11.0*

PROVO RIVER & UTAH LAKE

Camp Altamont	11J20	7300	12/30	16	3.3	0.2	7.3
Daniels-Strawberry Smt.	11J23	8000	12/30	8	1.7	0.6	5.3
East Portal	11J7	7560	12/30	6	0.6	0.0	4.6*
Payson R.S.	11K1	8050	12/27	18	3.6	2.8	6.0*
Rock Bridge	11K2	6750	12/27	17	3.4	1.4	4.1*
Soapstone R.S.	11J25	7800	12/30	9	1.6	0.5	5.3*
South Fork R.S.	11J19	6100	12/30	12	2.6	0.0	4.1*
Strawberry Divide	11J8	8000	12/30	16	3.0	T	8.7*
Timpanogos Cave Camp	11J18	5500	12/30	6	1.1	0.0	2.2*
Timpanogos Divide	11J21	8140	12/30	24	6.6	0.8	11.4
Trial Lake	10J8	9800	12/30	24	5.3	2.7	11.0*

(a) 1943-57, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. * Estimated 1943-57, 15 year average.

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a

JORDAN RIVER & GREAT SALT LAKE

Farmington Canyon(l)	11J12	6950	12/30	22	3.8	2.8	8.9*
Farmington Canyon(u)	11J11	8000	12/30	21	4.4	2.8	10.4*
Lamb's Canyon	11J14	6600	1/2	17	3.0	1.6	6.0*
Middle Canyon	12J3	7000	12/27	18	3.9	1.5	5.3*
Mill D South Fork	11J10	7400	1/1	17	3.1	2.5	7.6*
Parley's Canyon Smt. x	11J15	7500	12/28	16	3.2	2.1	7.3*
Silver Lake	11J16	8725	1/1	21	5.0	2.3	11.5

UPPER SEVIER RIVER

(South of Richfield, Utah)

Bryce Canyon	12M8	8000	12/31	Trace	Trace	0.5	1.9*
Duck Creek R.S.	12M4	8560	12/30	5	1.4	0.4	5.0*
Harris Flat	12M5	7700	12/30	Trace	Trace	0.2	2.5*
Kimberly Mine	12L6	8900	12/30	18	3.3	1.9	6.7*
Long Valley Jct. x	12M6	7500	12/30	0	0.0	0.3	1.0*
Midway Valley	12M2	9800	12/28	18	4.2	2.0	9.7*
Widtsoe-Escalante Smt.	11M1	9500	12/31	6	1.1	1.4	3.2*
Widtsoe-Escalante #2	11M2	9500	12/31	8	2.2	1.5	4.0*
Widtsoe-Escalante #3	11M3	9500	12/31	11	2.4	2.4	- -

LOWER SEVIER RIVER

(Including San Pitch River)

Beaver Dams	11K13	8000	12/26	16	2.8	1.9	3.9*
Farnsworth Lake	11L1	9900	12/30	19	4.2	3.5	7.4*
G.B.R.C. Headquarters	11K11	8700	12/31	19	4.2	1.6	5.8*
G.B.R.C. Meadows	11K10	10000	12/31	24	5.7	2.6	10.0*
Gooseberry R.S.	11L2	8400	12/30	16	3.2	2.8	4.6*
Gooseberry Reservoir x	11K4	8700	12/27	17	4.6	1.0	7.3*
Mammoth R.S.-Ctnwd.Crk.	11K3	8800	12/27	20	4.6	0.5	7.7*
Mt. Baldy R.S.	11K12	9500	12/26	23	4.8	1.9	9.3*
Shingle Mill	12L11	6200	12/30	16	2.9	- -	- -

COAL CREEK

Midway Valley x	12M2	9800	12/28	18	4.2	2.0	9.7*
Urie Flat	12M10	8450	12/28	5	1.1	0.4	1.8*
Webster Flat x	12M3	9200	12/28	12	2.5	1.1	7.6*

(a) 1943-57, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. * Estimated 1943-57, 15 year average.

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a

COLORADO RIVER DRAINAGE

DUCHESNE RIVER

Daniels-Strawberry Smt.x	11J23	8000	12/30	8	1.7	0.6	5.3
East Portal x	11J7	7560	12/30	6	0.6	0.0	4.6*
Indian Canyon	10K1	9100	12/30	8	1.3	0.8	5.2*
Julius Park	9J6	9800	12/30	14	2.5	1.0	- -
Mosby Mountain	9J5	9500	12/30	8	1.2	0.8	5.0*
Paradise Park	9J3	10100	12/30	11	2.1	0.7	5.7*
Soapstone R.S. x	11J25	7800	12/30	9	1.6	0.5	5.3*
Strawberry Divide x	11J8	8000	12/30	16	3.0	T	8.7*
Trial Lake x	10J8	9800	12/30	24	5.3	2.7	11.0*

PRICE RIVER

Dry Valley Divide	11K8	7800	12/30	8	1.1	0.2	4.7*
Gooseberry Reservoir	11K4	8700	12/27	17	4.6	1.0	7.3*
Indian Canyon x	10K1	9100	12/30	8	1.3	0.8	5.2*
Jones Ranch	11K7	7600	12/30	Trace	Trace	0.2	2.6*
Mammoth R.S.-Ctnwd.Crk.x	11K3	8800	12/27	20	4.6	0.5	7.7*
Mud Creek	11K33	8300	12/30	10	1.9	1.1	5.0*

SAN RAFAEL RIVER

G.B.R.C. Meadows x	11K10	10000	12/31	24	5.7	2.6	10.0*
Gooseberry Reservoir x	11K4	8700	12/27	17	4.6	1.0	7.3*
Mammoth R.S.-Ctnwd Crk.x	11K3	8800	12/27	20	4.6	0.5	7.7*
Mt. Baldy R.S. x	11K12	9500	12/26	23	4.8	1.9	9.3*

FREMONT RIVER

Farnsworth Lake x	11L1	9900	12/30	19	4.2	3.5	7.4*
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MUDDY RIVER

Mt. Baldy R.S. x	11K12	9500	12/26	23	4.8	1.9	9.3*
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ESCALANTE RIVER

Widtsoe-Escalante Smt.	11M1	9500	12/31	6	1.1	1.4	3.2*
Widtsoe-Escalante #2	11M2	9500	12/31	8	2.2	1.5	4.0*
Widtsoe-Escalante #3	11M3	9500	12/31	11	2.4	2.4	- -

VIRGIN RIVER

Duck Creek R.S.	12M4	8560	12/30	5	1.4	0.4	5.0*
Harris Flat x	12M5	7700	12/30	Trace	Trace	0.2	2.5*
Long Valley Junction	12M6	7500	12/30	0	0.0	0.3	1.0*
Midway Valley x	12M2	9400	12/28	18	4.2	2.0	9.7*
Webster Flat	12M3	9200	12/28	12	2.5	1.1	7.6*

(a) 1943-57, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. * Estimated 1943-57, 15 year average.

PRECIPITATION DATA (Inches)

DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. 10/1 TO DATE		
		DATE OF READING	MONTH'S PRECIPITATION	1943-57 AVERAGE	THIS YEAR	1943-57 AVERAGE	PERCENT OF AVERAGE

a

a

GREAT BASIN DRAINAGE

UPPER BEAR RIVER (Above Harer, Idaho)

Salt River Summit	7900	12/30	1.90	- -	6.90	9.30	74
Trial Lake*	9800	12/30	- -	- -	4.75	11.40	42

LOWER BEAR RIVER (Below Harer, Idaho)

Garden City Summit	7600	12/30	2.52	- -	6.82	9.10	75
Klondike Narrows	7400	12/30	- -	- -	7.85	11.35	69
Tony Grove R.S.(SCS)	6250	12/30	1.56	- -	5.07	- -	--
Willow Flat	6100	- -	- -	5.48	- -	12.40	--

OGDEN RIVER

Ben Lomond(lower)	5850	12/27	1.65	6.10	9.39	13.05	72
Ben Lomond Trail	6000	12/27	1.62	- -	9.86	- -	--
Causey Dam	5500	- -	- -	- -	- -	- -	--

WEBER RIVER

Farmington Guard Sta.(1)	7500	12/30	2.24	5.95a	8.20	15.14a	54
Farmington Rice (1)	7000	12/30	2.39	5.40a	7.99	13.52a	59
Mt. Dell Dam(2)*	5500	12/31	0.85	2.56a	4.34	7.00a	62
Parley's Canyon Smt.	7500	12/28	- -	- -	5.79	10.54	55
Silver Lake(Brighton)*(2)	8725	12/31	1.41	5.87a	7.47	13.97a	53
Smith & Morehouse	7600	12/27	- -	- -	5.75	9.00	64
Trial Lake*	9800	12/30	- -	- -	4.75	11.40	42

PROVO RIVER & UTAH LAKE

Daniels-Strawberry Smt.	8000	12/30	0.71	4.00	4.43	9.05	49
East Portal Ridge	7800	12/30	0.80	- -	4.29	- -	--
Payson R.S.	8050	12/27	- -	- -	4.94	9.10	54
Soapstone R.S.	7800	12/30	2.50	3.75	6.34	8.70	73
Strawberry Res.-E.Porta	7606	12/30	0.42	1.95	3.79	5.35	71
Timpanogos Divide	8200	12/30	2.00	5.60a	10.54	13.05a	81
Trial Lake	9800	12/30	- -	- -	4.75	11.40	42

JORDAN RIVER & TOOELE VALLEY

Middle Canyon	7000	12/27	- -	- -	7.06	9.44	75
Mt. Dell Dam(2)	5500	12/31	0.85	2.56a	4.34	7.00a	62
Parley's Canyon Smt.	7500	12/28	- -	- -	5.79	10.54	55
Silver Lake(Brighton)(2)	8725	12/31	1.41	5.87a	7.47	13.97a	53

(1) Data supplied by U.S Forest Service

* Adjacent Drainage

(2) Data supplied by USWB

a All values estimated except those where symbol "a" occurs.

PRECIPITATION DATA (Inches)

DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. 10/1 TO DATE		
		DATE OF READING	MONTH'S PRECIPITATION	1943-57 AVERAGE	THIS YEAR	1943-57 AVERAGE	PERCENT OF AVERAGE

a

a

SEVIER RIVER ABOVE RICHFIELD

Duck Creek R.S.	8560	12/30	0.73	3.33	4.23	6.35	67
Kimberly Mine	8900	12/30	1.80	- -	5.20	- -	--
Webster Flat*	9200	12/28	0.72	4.10	5.29	6.70	79
Widtsoe-Escalante #3	9500	12/31	0.70	1.70	3.85	5.78	67
Widtsoe R.S.	7600	12/31	0.12	0.88a	1.62	2.68	60

SEVIER RIVER BELOW RICHFIELD (Including San Pitch River)

Beaver Dams	8000	- -	- -	- -	- -	- -	--
Farnsworth Lake	9900	12/30	1.66	2.65	4.80	7.30	66
G.B.R.C. Headquarters(1)	8700	12/31	1.85	3.05a	5.82	8.27a	70
G.B.R.C. Meadows(1)	10000	12/31	2.02	3.24a	6.65	8.94a	74
G.B.R.C. Oaks(1)	7655	12/31	1.32	2.23a	4.16	6.08a	68
Gooseberry R.S.(1)	7800	12/30	1.46	1.83	3.81	5.59	68
Gooseberry Reservoir*	8700	12/27	1.50	2.85	5.41	7.80	69
Mammoth R.S. #2*	8600	12/27	1.45	2.80	5.65	7.75	73
Mt. Baldy	9500	12/26	- -	- -	4.49	- -	--
Shingle Mill	6200	12/30	1.51	- -	5.15	- -	--

BEAVER RIVER

Beaver Canyon P.H.(2)	7275	12/31	0.38	1.56a	2.35	4.22a	56
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COAL CREEK

Webster Flat*	9200	12/28	0.72	4.10	5.29	6.70	79
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COLORADO RIVER DRAINAGE

DUCHESNE RIVER

Daniels-Strawberry Smt.*	8000	12/30	0.71	4.00	4.43	9.05	49
East Portal Ridge*	7800	12/30	0.80	- -	4.29	- -	--
Indian Canyon	9100	12/30	- -	- -	2.50	- -	--
Julius Park	9800	12/30	- -	- -	3.12	7.50	42
Moon Lake	8150	12/31	0.10	1.67a	2.40	4.68a	51
Paradise Park	10100	12/30	- -	- -	3.60	7.75	46
Soapstone R.S.*	7800	12/30	2.50	3.75	6.34	8.70	73
Strawberry Res.-E.Portal*	7606	12/30	0.42	1.95	3.79	5.35	71
Trial Lake*	9800	12/30	- -	- -	4.75	11.40	42

(1) Data supplied by U.S.Forest Service
* Adjacent Drainage

(2) Data supplied by U.S.Weather Bur.
a All values estimated except
those where symbol "a" occurs.

PRECIPITATION DATA (Inches)

DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. 10/1 TO DATE		
		DATE OF READING	MONTH'S PRECIPITATION	1943-57 AVERAGE	THIS YEAR	1943-57 AVERAGE	PERCENT OF AVERAGE

a

a

PRICE RIVER

Gooseberry Reservoir	8700	12/27	1.50	2.85	5.41	7.80	69
Indian Canyon	9100	12/31	- -	--	2.50	- -	--
Mammoth R.S. #2	8600	12/27	1.45	2.80	5.65	7.75	73
Mud Creek	8300	12/30	0.65	3.55	3.15	7.35	43

SAN RAFAEL RIVER

G.B.R.C. Meadows *(1)	10000	12/31	2.02	3.24a	6.65	8.94a	74
Gooseberry Reservoir *	8700	12/27	1.50	2.85	5.41	7.80	69

MUDDY RIVER

Mt. Baldy R.S. *	9500	12/26	- -	- -	4.49	- -	- -
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FREMONT & ESCALANTE RIVERS

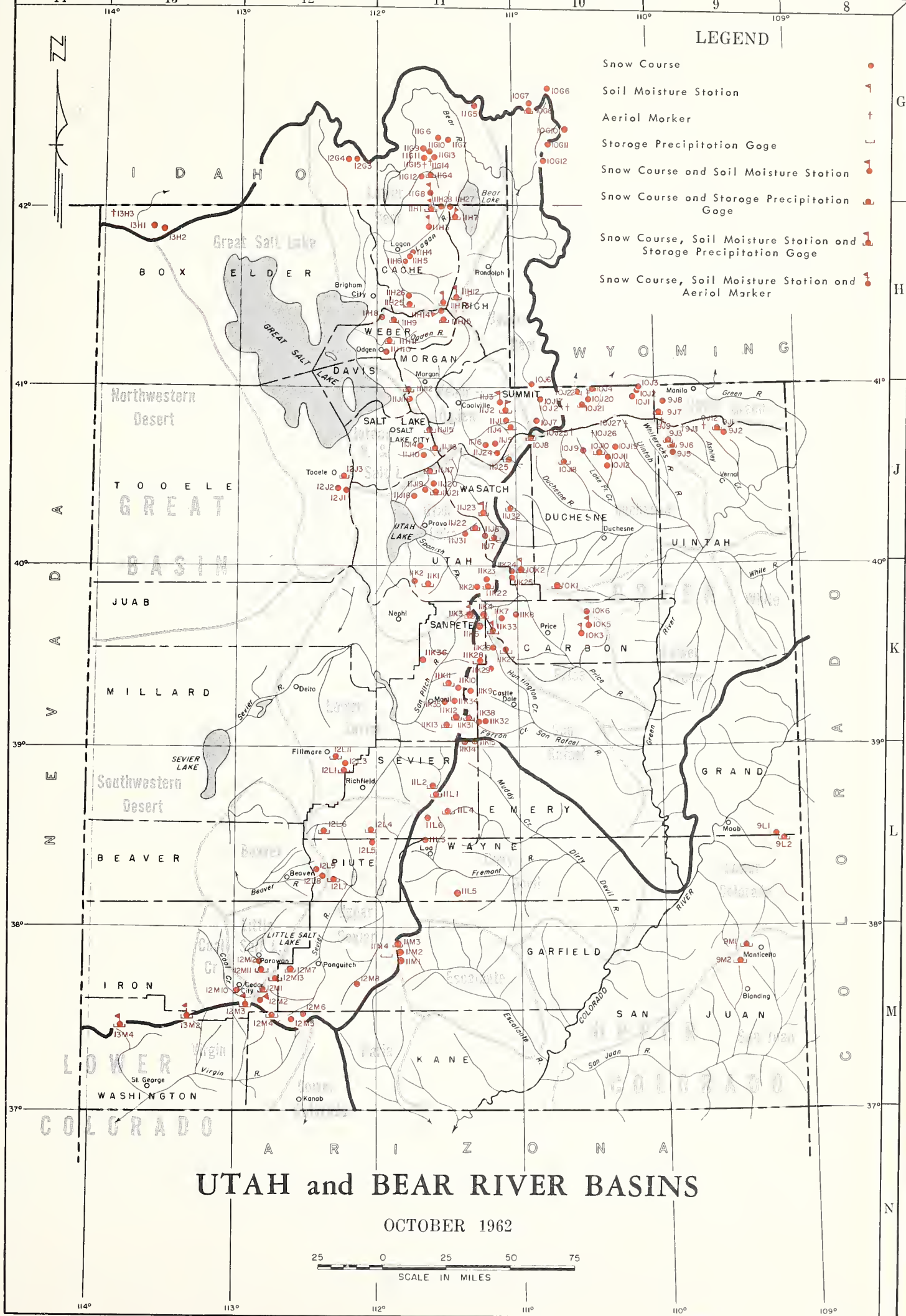
Farnsworth Lake *	9900	12/30	1.66	2.65	4.80	7.30	66
Widtsoe-Escalante #3	9500	12/31	0.70	1.70	3.85	5.78	67

VIRGIN RIVER

Duck Creek R.S.	8560	12/30	0.73	3.33	4.23	6.35	67
Webster Flat	9200	12/28	0.72	4.10	5.29	6.70	79

(1) Data supplied by U.S.Forest Service
* Adjacent Drainage

(2) Data supplied by USWB
a All values estimated except
those where symbol "a" occurs.



INDEX TO UTAH AND BEAR RIVER BASIN

NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.
GREAT BASIN DRAINAGE						
UPPER BEAR RIVER (above Horeer, Idaho)						
10011	W	84g Park	7	27N	117W	8700
10016	W	Burts-Miller Ranch	19	3N	10E	7900
1007	W	COC Camp x	9	29N	118W	7500
10077	W	Hayden Fork	1	1S	9E	9900
10012	W	Kelly Ranger Station	13	26N	118W	8200
11112P	W	Monte Cristo R.S.	4	8N	4E	8960
10010	W	Piney LaBarge x	19	29N	114W	8820
1006	W	Poison Meadows x	29	30N	116W	8500
1008P	W	Salt River Summit x	32	29N	118W	7900
1017P	U	Stillwater Camp	32	2N	10E	8550
LOWER BEAR RIVER (below Horeer, Idaho)						
11114M	U	Beaver Creek-Skunk Creek	22	8N	3E	7150
11111	I	Christensen Ranch	27	13S	41E	5600
11112	I	Cub River Ranger Station	5	15S	41E	5400
11114M	I	Dry Basin	30	13S	42E	7900
11113MP	I	Dry Creek Pond	19	8N	4E	8230
11124	I	Dry Creek Flat	31	13S	37E	6350
1116	I	Emigrant Summit	21	12S	42E	7350
11167	I	Franklin Canyon (mouth)	24	12S	42E	6500
1118M	I	Franklin Basin	1	16S	41E	8000
1117MP	I	Garden City Summit	35	14N	4E	7600
11115a	I	Horseshoe Basin	31	13S	42E	8000
1111MP	I	Klondike Narrows	10	14N	3E	7400
11113	I	Liberty Springs	7	13S	42E	8420
11125F	U	Little Bear (lower)	15	8N	1E	5800
11124P	U	Little Bear (upper)	22	8N	1E	5550
11116	U	Monte Cristo R.S.	3	15N	4E	9600
11123	I	Mt. Logan	32	13S	37E	6550
11162	I	Mixford Mountain	26	12N	4E	7000
11115	U	Spring Hollow (lower)	39	12N	3E	8000
11127	U	Spring Hollow (upper)	37	14N	3E	8500
11128	U	Steeple Hollow #1	9	14N	3E	7700
11109	I	Steeple Hollow #2	9	13S	41E	5800
11110	I	Strawberry Mink Divide	11	13N	41E	6800
11113M	I	Tony Creek Ranger Station	11	13N	41E	6250
1114P	I	Willow Flat	2	15S	41E	6100
OGDEN RIVER						
11114M	U	Beaver Creek-Skunk Creek	22	8N	3E	7150
11118	U	Ben Leonard Peak	7	7N	1E	8000
11119P	U	Ben Leonard (lower)	1	7N	1W	5850
11113MP	U	Dry Broad Pond	19	8N	4E	8230
11112P	U	Monte Cristo R.S.	3	8N	4E	8960
11110	U	Mt. Ogden	5	1E	1E	8600
11115P	U	Sagebrush Flat	21	7N	3E	6300
11111P	U	Snow Basin	32	6N	1E	6420
WEBER RIVER						
11124	U	Beaver Creek R.S.	28	2S	7E	7500
11171	U	Chalk Creek #1	4	1N	8E	9100
1112MP	U	Chalk Creek #2	17 & 20	2N	8E	8000
1113M	U	Chalk Creek #3	7	3N	8E	7500
11112P	U	Farmington Canyon (lower) x	14	3N	1E	6950
11111	U	Farmington Canyon (upper) x	26	3N	1E	8000
11114	U	Lamb's Canyon x	19	1S	3E	6600
11115P	U	Parley's Canyon Summit	9 & 10	1S	3E	7600
11116	U	Reddon Mine (lower)	1	2S	6E	8500
11115	U	Reddon Mine (upper)	1	2S	6E	9000
11116P	U	Silver Lake (Brighton) x	35	2S	3E	8725
1114P	U	Smith & Morehouse	25	1N	7E	7600
1118P	U	Trial Lake x	5	2S	9E	9800
PROVO RIVER & UTAH LAKE						
11120	U	Camp Altamont	29	4S	3E	7300
11121	U	Clear Creek Ridge #1	18	11S	6E	9200
11122P	U	Clear Creek Ridge #2	9	11S	6E	8000
11123	U	Clear Creek Ridge #3	27	10S	6E	6600
11123MP	U	Daniels-Strawberry Summit	20	2S	12W	8000
11117P	U	Dutchman R.S.	27	3S	3E	7560
1117P	U	East Portal	35-36	7S	6E	7560
11122P	U	Hobble Creek Summit	20	7S	5E	7420
11131	U	Hobble Creek	21	7S	5E	6400
1111P	U	Payson R.S.	30	10S	3E	8050
1112	U	Rock Bridge	14	13S	2E	6750
11125P	U	Soapstone R.S.	9	3S	8E	7800
11119	U	South Fork R.S.	24	4S	2E	6100
11118	U	Strawberry Divide	34 & 35	7S	6E	8000
11115	U	Timpanogos Cave Camp	27	4S	2E	5500
11121P	U	Timpanogos Divide	33	4S	3E	8140
1018P	U	Trial Lake	5	2S	9E	9800
JORDAN RIVER & GREAT SALT LAKE						
1122	U	Bevan's Cabin	24	4S	4W	6450
11112P	U	Farmington Canyon (lower)	14	3N	1E	6950
11111	U	Farmington Canyon (upper)	26	3N	1E	8000

NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.
916P	U	Julius Park	20	31	1E	9400
1025a	U	Lakefork Basin	13	41	7W	11100
10310P	U	Lakefork Mountain #2	2 & 3	21	5W	10200
10311	U	Lakefork Mountain #3	2 & 17	21	4W	8700
10312	U	Lakefork Mountain #3	29	21	4W	8100
915	U	Mosby Mountain	27	2S	18E	9500
913P	U	Paradise Park	7	31	1E	10100
10318P	U	Rock Creek	21	2N	7W	7900
1025P	U	Soapstone R.S. x	9	3S	8E	7900
11138	U	Strawberry Divide x	34 & 35	7S	6E	8000
1038P	U	Trial Lake x	5	2S	9E	9800
10K2MP	U	White River #1 x	11	10S	8E	5550
PRICE RIVER						
10K5M	U	Corral	32	13S	14E	8200
11K8	U	Dry Valley Divide	20	12S	8E	7800
11K4P	U	Gooseberry Reservoir	25	13S	5E	2700
10K3M	U	Grassy Trail Creek-Left Fork	2	14S	13E	7770
11K5	U	Huntington-Horseshoe	12	14S	5E	9800
10K1P	U	Indian Canyon x	2	11S	10E	9100
11K7	U	Jones Ranch	32	12S	7E	7600
11K3MP	U	Mammoth R.S. - Cottonwood Creek x	13 & 23	13S	5E	8200
11K3MP	U	Mud Creek	4	14S	7E	8300
10K6	U	Timberline	28	13S	13E	9100
10K2MP	U	White River #1	11	10S	8E	8550
11K24	U	White River #2	9	10S	8E	7600
11K25	U	White River #3	30	10S	8E	7400
SAN RAFAEL RIVER						
11K31P	U	Buck Flat	23	19S	4E	9400
11K4P	U	Gooseberry Reservoir	25	13S	5E	2700
11K5	U	Huntington-Horseshoe	12	14S	5E	9800
11K28P	U	Red Pine Ridge	5	16S	6E	9200
11K38	U	Rush Pond	24	19S	4E	9800
11K9	U	Seelye Creek R.S.	23	17S	7E	10000
11K27P	U	Stuart R.S.	8 & 9	15S	7E	7350
11K26	U	Switchback	14	14S	6E	5600
11K29	U	Upper Joe's Valley	21	16S	6E	8800
11K32	U	Wrigley Creek	27	19S	5E	9000
MUDDY RIVER						
11K14	U	Black's Fork	34	20S	4E	7200
11K15	U	Dill's Camp	27	20S	4E	9200
FREMONT RIVER						
1114P	U	Black's Flat-U.M. Creek	33	24S	3E	9250
11115	U	Donkey Reservoir	9	30S	4E	9800
11113	U	Fish Lake	35	26S	1E	8700
11116	U	Johnson Valley	24	25S	2E	9250
ESCALANTE RIVER						
11M1	U	Widtsoe-Escalante Summit	22	34S	1W	9500
11M2	U	Widtsoe-Escalante #2	22	34S	1W	9500
11M3P	U	Widtsoe-Escalante #3	22	34S	1W	9500
VIRGIN RIVER						
12M1P	U	Cedar Breaks x	2	37S	9W	10390
12M4P	U	Duck Creek R.S. x	11	38S	8W	8550
12M5	U	Harris Flat x	24	38S	7W	7700
12M6	U	Long Valley Junction	22	38S	6W	7500
12M2M	U	Midway Valley x	26	37S	9W	9800
12M3MP	U	Webster Flat	20	37S	9W	9200
SOUTHEASTERN UTAH DRAINAGES						
9M1P	U	Backboard Flat	36	33S	22E	9000
9M2P	U	Camp Jackson	22	34S	22E	5600
911	U	LaSal Mountain	5	27S	24E	8800
912P	U	LaSal Mountain (upper)	3	27S	24E	9400
COLUMBIA RIVER DRAINAGE						
RAFT RIVER						
13M2	I	Clear Creek Meadows	26	14N	14W	9050
13M1	I	One-Mile Summit	19	14N	14W	7350
13M3a	I	Vifont	17	14N	17W	7675
LEGEND						
Numbering system (example)						
10J7		SNOW COURSE ONLY				
10J7P		SNOW COURSE AND PRECIPITATION GAGE				
10J7M		SNOW COURSE AND SOIL MOISTURE STATION				
10J7MA		SNOW COURSE AND AERIAL MARKER				
10J7MP		SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER				
10J7M		SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE				
10J7P		SOIL MOISTURE STATION ONLY				
10J7M		AERIAL MARKER ONLY				
10J7P		STORAGE PRECIPITATION GAGE ONLY				
X		ADJACENT DRAINAGE				

Agencies Cooperating in Utah Snow Surveys

U. S. GOVERNMENT AGENCIES

U. S. Department of Agriculture
Soil Conservation Service
Forest Service
U. S. Department of Commerce
Weather Bureau
U. S. Department of Interior
Bureau of Reclamation
Geological Survey
National Park Service

STATE AGENCIES

Utah Agricultural Experiment Station
Utah Fish and Game Department
Utah State Engineer
Bear River Commissioner
Price River Commissioner
Provo River Commissioner
Sevier River Commissioners
Spanish Fork River Commissioner
Utah Lake and Jordan River Commissioner
Utah Water and Power Board

MUNICIPALITIES

Manti
Salt Lake City

ORGANIZED PUBLIC AGENCIES

Beaver River Water Users Association
Board of Canal Presidents - Jordan River
Emery Canal and Reservoir Company
Moon Lake Water Users Association
Ogden River Water Users Association
Provo River Water Users Association
Strawberry Water Users Association
Sevier River Water Users Association

PRIVATE AGENCIES

Kaiser Steel Corporation

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